First-aid treatment of epistaxis

First-aid treatment of epistaxis – confirmation of widespread ignorance

David Strachan, James England

Summary

A survey of 500 members of the public was carried out in which they were asked how they would deal with a nose bleed. Only 50 out of 443 responses were judged as being correct, confirming a clinical impression, long held by those dealing with epistaxis, that there is a high level of ignorance as to the correct first aid treatment. The survey also suggested that the lack of knowledge was not confined to the general public but evident in those trained in healthcare.

Keywords: epistaxis; first-aid treatment

Epistaxis is the most common acute otolaryngological complaint. The exact incidence is uncertain with reports of between 10 and 60% of the population having suffered at least one significant episode. ^{1 2 3} It is beyond doubt that the problem of epistaxis constitutes a significant amount to the workload of both hospital Accident and Emergency departments and Otolaryngological departments.

Whilst some nose bleeds may require active intervention and necessitate hospital admission, the majority settle with simple first-aid measures. Over the years a number of methods for stemming a nose bleed have been advocated, ranging from dripping blood into a basin whilst placing a cork in the mouth (Trotter's method),4 to inserting strips of smoked bacon into the nasal cavities!5 It is, however, generally accepted that the most satisfactory method is to pinch the lower part of the nose thus applying direct pressure to Little's area, the most likely site of the bleeding point.6 In addition, the head should be tilted forward, facilitating clot formation and avoiding a steady trickle into the post-nasal space, as swallowed blood is extremely nauseating.7 This technique is advocated in standard first-aid manuals and ENT textbooks8 9 and is illustrated in figure 1.

It is evident to those of us treating epistaxis on a regular basis that this simple first-aid advice is not well known by the general public. Although much has been written on the treatment of epistaxis, the ignorance of the public on this subject has not been documented. The purpose of this study was therefore to try and confirm this clinical impression by asking how people would attempt to stop a nose bleed and compare this with the standard method advocated above.



Figure 1 Correct method to stem an epistaxis

Methods

Five hundred patients attending the ENT department at St James' Hospital, Leeds, were asked to complete a questionnaire (figure 2). Those attending the department with the complaint of epistaxis were excluded.

Results

Fourteen of the questionnaires were lost or defaced. In keeping with previously mentioned studies, over half of those questioned (251 out of 460), admitted to having suffered a nose bleed.

The results of the question relating to how they would go about arresting a nosebleed are outlined in table 1. A correct response was taken to be pinching the nose low down (response A) and holding the head forward rather than backward, although a response not specifying a particular head position was not judged incorrect.

With regard to other ways of arresting a nose bleed, 36 suggested a cold compress (which does have a physiological basis¹⁰), three suggested lying flat on one's back, one recommended a neck massage and another advocated placing a key down the back of one's clothing.

Most patients (85%) specified the source of advice which influenced their responses given and these are summarised in table 2.

Department of Otolaryngology, St James University Hospital, Leeds LS9 7TF, UK DR Strachan J England

Correspondence to Mr D R Strachan, Department of ENT Surgery, Bradford Royal Infirmary, Duckworth Lane, Bradford BD9 6RJ, UK

Accepted 23 July 1997

114 Strachan, England

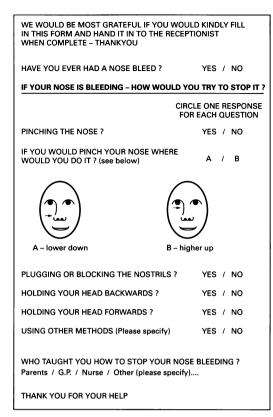


Figure 2 Questionnaire given to patients

Discussion

This study confirms the fact that the general public is ignorant of the correct method by which one should attempt to stem a nosebleed. It is also evident that even those claiming to have been shown the 'correct' method by healthcare workers (including doctors, nurses, St John's and other trained in first aid) are still, on the whole, incorrect. This may be due to the

1 Weiss NS. The relation of high blood pressure to headache and epistaxis and selected other symptoms. N Engl J Med 1972;287:631.

Table 1 Accuracy of responses to questionnaire

	Correct
1 Site of pinching nose	147 (35%)
2 Head position	147 (36%)
Overall response (both 1 and 2)	50 (11%)

Table 2 Analysis of accuracy of source of advice on how to stop a nose bleed

	Number	Correct (%)
Parents	228	9
Self-taught	47	13
Nurse	28	25
General practitioner	27	26
First aid course	25	24
Media	20	5
Schoolteacher	16	6
St John's Ambulance	11	9
Other relatives	10	0
Total	412	12

fact that their recall of information is inaccurate or else the trained healthcare workers are not knowledgable in this matter. One previous study would suggest the latter is correct, as it demonstrated widespread ignorance in the first-aid management of epistaxis by accident and emergency staff. The fact that many nursing staff do not know the correct first-aid treatment is admitted by nurses themselves. 12

As most epistaxis will stop with correct firstaid treatment it is important that those who administer such treatment are better educated as to the correct course of action. Thus the general public, and certainly all those working in healthcare, should be better trained as to correct epistaxis management. This may, in many cases, remove the need for a visit to the Accident and Emergency department and subsequent ENT referral.

² Petruson B, Rudin R. The frequency of epistaxis in a male population sample. *Rhinology* 1975;13(3):129-33.
3 Shaw CB, Wax MK, Wetmore SJ. Epistaxis: a comparison of

³ Shaw CB, Wax MK, Wetmore SJ. Epistaxis: a comparison of treatment (Review). Otolaryngol Head Neck Surg 1993;109: 60–5.

⁴ Ludman H. ABC of ENT. Nose bleeds. *BMJ* 1981;282: 967-9

⁵ Hirsch C. Ligation of the internal maxillary artery in patients with nasal haemorrhage. Arch Otolaryngol 1936;24: 589-93.

⁶ Mann CV, Russell RCG, eds. Bailey & Love's Short practice of

surgery, 21st edn. London: Chapman & Hall, 1992; p 672.

Pearson BW. Epistaxis. Postgrad Med 1975;57(6):116-9.
 Dhillon RS, East CA. Ear, nose & throat and head & neck surgery. Churchill Medical Communications, 1994; p 46.

⁹ St John Ambulance, St Andrew's Ambulance Association, The British Red Cross Society. First Aid Manual, 6th edn. London: Dorling Kindersley, 1992; p 85.

¹⁰ Dost P, Polyzoidis T. Benefit of the ice pack in the treatment of nosebleed. HNO 1992;40:25-7.
11 McGarry GW, Moulton C. The first aid management of

¹¹ McGarry GW, Moulton C. The first aid management of epistaxis by accident and emergency department staff. Arch Emerg Med 1993;10:298–300.

¹² Honeysett J. Epistaxis. Nurs Times 1982;78:578-81.